NLSY79 APPENDIX 19:

SF-12 HEALTH SCALE SCORING

SF-12 Summary Scores

The SF-12, which stands for short-form 12-question, is a brief inventory of self-reported mental and physical health. This scale was administered to respondents who had turned 40 since their last interview as part of the age 40+ health module, included in the 1998 and 2000 surveys (and planned for inclusion in 2002 and 2004).

Rather than using the twelve questions separately, SF-12 users often create two summary scores:
- PCS-12 or Physical Component Summary (measures physical health): question name Q11-H40SF12_PCS_SCORE
- MCS-12 or Mental Component Summary (measures mental health): question name Q11-H40SF12_MCS_SCORE

CHRR has received permission to calculate these summary scores for NLSY79 respondents and release the scores with the main data set. Scores are created according to the manual by Ware, Kosinski, and Keller (1995) and are provided on the data set with the question names listed above. However, we are not permitted to release the scoring formula; interested users can purchase the scoring manual from Quality Metric (http://www.qmetric.com/products/publications/sf12.php3).

In large national surveys of the entire US population, both the PCS-12 and MCS-12 have a mean of 50 and a standard deviation of 10. The interpretation of these two scores is straightforward. NLSY79 respondents with a score above 50 have better health than the typical person in the general U.S. population (age is not held constant). NLSY79 respondents with scores below 50 have worse health than the typical U.S. person. Each one-point difference above or below 50 corresponds to a one-tenth of a standard deviation. For example, a person with a score of 30 is two standard deviations away from the mean.

TABLE 1: Summary Statistics for NLSY79 SF-12 Scores

	1998	**2000**
PCS	Mean: 52.54234 StDev: 7.36181	Mean: 52.52280 StDev: 7.77585
MCS	Mean: 53.09726 StDev: 7.84907	Mean: 53.05464 StDev: 8.25104

As Table 1 indicates, the typical NLSY79 respondent self-reports better health than the typical U.S. respondent. This matches the results described in the SF-12 scoring manual, which in addition to population norms reports the norms for U.S. residents who are between the ages of 35 and 44. The manual reports the mean PCS score for this subgroup as 52.18 (std. dev. 7.30) and the mean MCS score as 50.1 (std. dev. 8.62). The SF-12 manual resports higher-than-average physical scores proior to age 55 and rapicly falling scores after that age. Mental scores do not appear to decline with age.

Reference

Ware, John, Mark Kosinski and Susan Keller. 1995. *SF-12: How to Score the SF-12 Physical and Mental Health Summary Scales, 2nd edition*. Boston: The Health Institute, New England Medical Center.